

## ABSTRACT

A magnetic resonance imaging ("MRI") system comprising an MRI magnet assembly defining an imaging volume and an illumination system to illuminate the imaging volume. In a preferred embodiment, the MRI magnet assembly is within a shielded room and the illumination system comprises a light source outside of the shielded room, at least one light projector is connected to the MRI magnet assembly within the room and optical fibers optically couple the light source to the one or more light projectors. The MRI system preferably comprises an open MRI magnet assembly with a pole covered by a canopy. The light projector is preferably connected to the canopy. The optical fibers preferably enter the canopy at a first location, extend between the canopy and the pole to a second location where the light projector is connected to the pole, and exits the canopy to enter the light projector, at the second location. A plurality of light projectors are preferably provided connected to the canopy. The light projector is also preferably flexible. The light projector or projectors increase the illumination in the imaging volume, facilitating medical procedures conducted on a subject within the imaging volume.